U.S. Application No. 09/744,634 SECOND PRELIMINARY AMENDMENT

Attorney Docket: 3926.018

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a beam integrator (SV) is provided subsequent to the color image modulators (FM1, FM2) for reuniting the first partial light bundle (B1, G1, R1) with the second partial light bundle (B2, G2, R2), and a lens system (Ob) for output of the therefrom resulting color image.

- 2. A device according to Claim 1, wherein the beam splitter (ST2) includes a splitter dichroic mirror (D1) with triple band pass characteristic (B1, G1, R1).
- 3. A device according to Claim 2, wherein the beam integrator (SV) includes an integrator dichroic mirror (D2) with the other triple band characteristic (B2, G2, R2).
- 4. A device according to Claim 11, wherein the two color modulators (FM1, FM2) form a stereo camera.
- 5. A device according to Claim 1, wherein the first partial light bundle is comprised of three first narrow transmission ranges (B1, G1, R1) and the second partial light bundle is comprised of three second narrow transmission ranges (B2, G2, R2) complimentary to the first transmission ranges, wherein the transmission ranges (B1, G1, R1, B2, G2, R2) lie within the wavelength ranges of the blue, green and red receptors.
- 6. A device according to Claim 1, wherein the beam splitter (ST2) includes at least one splitter mirror.
- 7. A device according to Claim 1, wherein the beam integrator (SV) includes at least one integrator mirror.

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- 8. A device according to Claim 1, further including a pair of glasses (B) with interference filters (IF1, IF2) which provide different transmission characteristics for the left eye and the right eye, which produce for the left eye a half image with the first transmission range (B1, G1, R1) and for the right eye a further half image with the second transmission range (B2, G2, R2) for stereoscopic vision.
- 9. A device for recording a color image of an object, the device comprised of
 - a first camera (K1);
 - a second camera (K2);
- a beam splitter (ST1) placed between said object and said cameras (K1, K2), said beam splitter comprising mirrors (S1, S2, S3) and a dichroic mirror (D1) with a transmission and reflection characteristic such that light from said object being recorded impinging upon (D1) is spectrally separated into two partial light bundles, wherein the first partial light bundle is comprised of three first narrow transmission ranges (B1, G1, R1) and the second partial light bundle is comprised of three second narrow transmission ranges (B2, G2, R2) complimentary to the first transmission ranges, wherein the transmission ranges (B1, G1, R1, B2, G2, R2) lie within the wavelength ranges of the blue, green and red receptors.
- 10. A device as in claim 9, wherein the beam splitter spectrally separates the light from the object being recorded into two partial light bundles, wherein

one bundle has a component within the wavelength range 435 - 455 nm and the other has a component within the wavelength range 460 - 480 nm,

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one bundle has a component within the wavelength range 510 - 530 nm and the other has a component within the wavelength range 535 - 555 nm, and

one bundle has a component within the wavelength range 600 - $620\,$ nm and and the other has a component within the wavelength range 625 - $645\,$ nm.

11. A device for recording a color image, including a guide for the incident light,

a beam splitter (ST1, ST2) for separation of the radiation spectrum of the incident light into a first partial light bundle (B1, G1, R1) and a second partial light bundle (B2, G2, R2) complimentary to the first part light bundle (B1, G1, R1), and two color image modulators (FM1, FM2).

12. A device according to Claim 11, wherein the beam splitter (ST2) includes a splitter dichroic mirror (D1) with triple band pass characteristic (B1, G1, R1).

REMARKS

The claims have been amended for ease of examination.

Claim 1 - originally reciting `two color image modulators (FM1, FM2) for recording and reproducing the partial light bundles'' - has been divided into two claims - claim 1 concerning recording and new claim 11 concerning reproducing. Thus, the device claimed in new claim 1 which is designed for image reproduction (as shown e.g. in Fig. 4 and associated text) need not necessarily be capable of image recording, this now being claimed in new claim 11 (as shown in Fig. 2 and associated text).

New claim 12 parallels original claim 2.